Los Alamos National Laboratory (LANL)
Risk Reduction and Environmental Stewardship Division (RRES)
Solid Waste Regulatory Compliance Group (SWRC)

Comments
68 Federal Register (106): 33121-33123
RCRA-2003-0012

Background:

LANL is one of the U.S. Department of Energy's multiprogram, multidisciplinary research laboratories, managed by the University of California. Los Alamos thrives on having the best people doing the best science to solve problems of global importance. Los Alamos' core values combine security awareness, intellectual freedom and scientific excellence with national service to generate scientific solutions for the nation's most pressing problems.

LANL is both a large quantity generator and a permitted storage and treatment facility. LANL's waste management system is structured so that each individual hazardous waste generator in the laboratory setting is provided technical guidance in waste characterization and management, as needed. Technical guidance is provided by fully trained Waste Management Coordinators (WMCs) while generators supply all information in support of the hazardous waste determination process and pay for sampling and analysis when it is necessary.

RRES-SWRC appreciates the opportunity to submit comments for consideration by the United States Environmental Protection Agency.

General Comments:

For purposes of managing unknown wastes, a small volume is defined at LANL as less than one liquid gallon (or approximately four liters). The rationale for the small volume designation is that this is the minimum quantity of sample that is needed to analyze the waste. At and below this volume limitation, the sample is entirely consumed in the analytical procedure. Small volumes of unknown wastes are analyzed at LANL using the HazCat Chemical Identification System®. This allows the material to be categorized for further handling.

Volumes greater than one gallon or four liters of a single waste require a more detailed analytical scheme. These wastes are characterized through LANL's sampling and analysis procedure or by utilizing acceptable knowledge (AK) about the waste. Sampling and analysis are used when the waste is unknown or potentially contaminated with hazardous constituents. The use of AK is helpful and important in containing costs of the facility while providing adequate accurate information about the waste.

Many of the processes conducted in a laboratory setting have very specific inputs and outputs. In a lot of cases a mass balance equation is conducted to ensure that inputs into a system equal

the total amount of the desired outputted product and any waste(s) generated. Laboratory personnel that have a clear understanding of the process that created a waste can make an adequate determination as to the constituents and the concentration of those constituents within the waste. It is important in a laboratory setting to preserve the flexibility that AK provides.

Specific Comments:

Hazardous Waste Determination

1. **When should the hazardous waste determination be made in a laboratory setting?**

A waste determination should be made at the time of waste generation.

2. **What training is needed for lab personnel concerning hazardous waste determinations (e.g., full RCRA training or training that is made specific to chemical management duties)?**

Lab personnel must be made aware of chemical management duties and fully trained personnel (WMCs) should be available to assist waste generators with hazardous waste determinations.

3. **How should waste be labeled so it can be appropriately managed as hazardous waste (e.g., the words ‘‘hazardous waste’’ or a detailed chemical description)?**

The flexibility should be available to label waste as “hazardous waste” or specifically identify the chemical constituents, depending on knowledge of the waste.

4. **Where should the hazardous waste determination be made (e.g., on the bench or in the 90 to 180 day storage area)?**

Although a waste determination should be made at the time of waste generation the flexibility should be available to change or amend a waste determination in the <90 day storage area, should a determination be found to have been made in error.

Satellite Accumulation Area (SAA) Accumulation Time

If more than 55 gallons of hazardous waste or more than 1 quart of acute hazardous waste is accumulated at a SAA, the excess must be removed within three days.

1. **How should these requirements be applied in a laboratory context?**

No comment.

2. **How often do laboratories accumulate more than 55 gallons of waste in their SAA?**

Exceeding the 55 gallons at LANL happens very infrequently. Most laboratories generate small amounts of waste.

3. **What, if any, difficulties do environmental health and safety personnel have responding to waste pick-up calls, e.g., within the three-day time limit?**

See next question.

4. **How would a longer time frame for removal impact the cost of waste management and the ability to protect human health and the environment?**

A week's time would be more than adequate to arrange and conduct a pick-up of waste from an SAA. This would allow more time for the coordination and consolidation of pick-ups.

Treatment in SAAs:

1. **What types of treatment, other than neutralization, are laboratory personnel currently performing or would like to perform?**

LANL does not treat in a SAAs. LANL only treats at < 90 day storage areas or in a permitted storage areas.

2. **What would be the benefits of the desired types of treatment?**

No Comment.